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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/920,762      | 08/03/2001  | Takashi Kitaguchi    | 212135US2           | 5946             |

22850 7590 12/15/2005

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ALEXANDRIA, VA 22314

| EXAMINER |
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STOCK JR, GORDON J

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2877

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

(X)

|                              |                                      |   |  |
|------------------------------|--------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/920,762 | <b>Applicant(s)</b><br>KITAGUCHI ET AL. |  |
|                              | <b>Examiner</b><br>Gordon J. Stock   | <b>Art Unit</b><br>2877                 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 September 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 and 13-34 is/are allowed.
- 6) ☒ Claim(s) 10-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
- 1. ☒ Certified copies of the priority documents have been received.
  - 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The Amendment received September 29, 2005 has been entered into the record.

#### *Drawings*

2. The Drawing received September 29, 2005 has been accepted by the Examiner.

#### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 10-12** are rejected under 35 U.S.C. 102(b) as being anticipated by **Fuchs et al.** (5,870,136).

As for **claims 10-11**, Fuchs in a dynamic generation of light for tracking three dimensional scene geometry discloses the following: a picture taking part taking a picture of an object (col. 6, lines 15-17); a projecting part applying light having a predetermined pattern onto the object (col. 6, lines 7-15); a picture taking position specifying part detecting a position at which said picture taking part takes the picture of the object and generating position information specifying the position (col. 6, lines 29-36); a storing part storing an image obtained as a result of the picture of the object on which the light having the predetermined pattern is applied being taken by said picture taking and the position information with storage medium for the computer (col. 6, lines 25-45; col. 6, lines 1-4); controlled by a control signal provided externally with workstation (col. 6, lines 40-45 and lines 50-55).

As for **claim 12**, Fuchs discloses everything as above (see **claim 10**). In addition, he discloses taking a picture of the object in which the light having the predetermined pattern is not applied by taking a picture under a different pattern (col. 7, lines 20-30).

***Allowable Subject Matter***

5. **Claims 1-9 and 13-34** are allowed.

As to **claim 1**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a shape measurement system the particular three-dimensional shape composing part, in combination with the rest of the limitations of **claims 1-4, 21-22**.

As to **claim 5**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a shape measurement system the particular three-dimensional shape composing part, in combination with the rest of the limitations of **claims 5-6, 23-24**.

As to **claim 7**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a shape measurement system the particular three-dimensional shape composing part, in combination with the rest of the limitations of **claims 7-9, 25-26**.

As to **claim 13**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a shape measurement method the particular step d), in combination with the rest of the limitations of **claims 13-14, 27-28**.

As to **claim 15**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a shape measurement method the particular step e), in combination with the rest of the limitations of **claims 15, 29, 30, 33, 34**

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As to **claim 16**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a computer readable medium the particular expressing programming step, in combination with the rest of the limitations of **claims 16-19, 31-32**.

As to **claim 20**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a computer readable medium the particular expressing programming step, in combination with the rest of the limitations of **claim 20**.

### ***Response to Arguments***

6. Applicant's arguments with respect to **claims 10-12** have been considered but are moot in view of the new ground(s) of rejection. As for the arguments in regards to the remaining claims, the Examiner has found them persuasive. Subsequently, due to the persuasiveness of the arguments and the amendment to the claims, the previous rejections under 35 U.S.C. 103(a) have been withdrawn.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent 6,522,787 to Kumar et al.

US 2002/0113878 to Iwai et al.

### ***Fax/Telephone Numbers***

If the applicant wishes to send a fax dealing with either a proposed amendment or a discussion with a phone interview, then the fax should:

1) Contain either a statement "DRAFT" or "PROPOSED AMENDMENT" on the fax cover sheet; and

2) Should be unsigned by the attorney or agent.

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This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

*Papers related to the application may be submitted to Group 2800 by Fax transmission. Papers should be faxed to Group 2800 via the PTO Fax machine located in Crystal Plaza 4. The form of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Machine number is: (571) 273-8300*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gordon J. Stock whose telephone number is (571) 272-2431.

The examiner can normally be reached on Monday-Friday, 10:00 a.m. - 6:30 p.m.

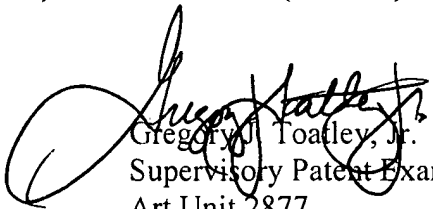
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr., can be reached at 571-272-2800 ext 77.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private Pair system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



gs

December 11, 2005



Gregory J. Toatley, Jr.  
Supervisory Patent Examiner  
Art Unit 2877

12 Dec 05